

REPORT
CD NO.

COUNTRY	USSR
SUBJECT	Scientific - Geophysics, geodesy
HOW PUBLISHED	Book
WHERE PUBLISHED	Moscow
DATE PUBLISHED	1948
LANGUAGE	Russian

DATE OF INFORMATION 1944

DATE DIST. 2 Jul 1951

NO. OF PAGES 3

SUPPLEMENT TO REPORT NO.

THIS IS UNEVALUATED INFORMATION

Trudy Soveshchaniya po Metodam Izucheniya Dvizheniy i Deformatsiy
Zemnoy Kory, Geodezizdat,

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This book is a collection of papers which were read at the conference on deformations of the earth's crust, held in December 1944 by the Seismological (now Geophysical) Institute of the Academy of Sciences USSR and the Central Scientific-Research Institute of Geodesy, Aerial Surveying, and Cartography, Main Administration of Geodesy and Cartography. Geologists, geomorphologists, geophysicists, gravimetrists, geodesists, and astronomers participated in the conference.

The group of tectonic geologists and geomorphologists compiled present-day views on types and laws governing mainly vertical oscillatory movements, based on the work of Soviet scientists in the past 10 years. Professor N. I. Nikolayev's report, in which he demonstrated a map of the most recent vertical movements in the USSR, attracted general attention.

The geophysicists (Ye. F. Savarenskiy and V. F. Bonchkovskiy) established a close relationship between deep-focus earthquakes and deformations in the earth's crust and emphasized the importance of thorough studies of this relationship, including tilt-measuring observations. N. N. Pariyskiy's report described geophysical factors which cause deformations in the earth's crust and particularly emphasized the importance of the slowing rotation of the earth.

The geodesists presented a number of theories and facts favoring the isostasy hypothesis (Ye. A. Mudretsova), showed the possibility of subcrust magma movements, and demonstrated that recent geodetic and geophysical data on the earth's structure are in good agreement (V. A. Magnitskiy). They familiarized the conference participants with the potentialities of geodesy and astronomy for obtaining numerical characteristics of movements of the earth's crust. In addition, V. P. Shcheglov reported that repeated longitudinal determinations have not revealed any movement of continents; and Yu. D. Bulanzhe asserted that repeated accurate gravimetric observations at various points of the earth have not shown any notable changes in acceleration of gravity g .

- 1 -

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Participants received favorably plans to organize complex works on the deformations in the earth's crust in one of the epicentral regions of Middle Asia and on Kamchatka; these plans have already been implemented for 3 years by the Academy of Sciences USSR.

The conference adopted a resolution to publish the reports heard. The Seismological (now Geophysical) Institute of the Academy of Sciences took on the task of editing the papers for publication, and the Main Administration of Geodesy and Cartography accepted the responsibility for their publication.

TABLE OF CONTENTS

	<u>Page</u>
Foreword	3
V. V. Belousov, "Oscillatory Movements in the Earth's Crust: Their Development, Properties, and Problems of Studying Them"	7
N. I. Nikolayev, "Present-Day Tectonic Movements in the USSR and Geological Methods of Studying Them"	22
K. K. Markov, "Geomorphological Methods of Studying Movements in the Earth's Crust"	47
V. P. Zenkovich, "Methods of Determining Vertical Movements From the Morphology of Shores"	69
Ye. A. Mudretsova, "Isostasy and Its Role in Deformations of the Earth's Crust"	80
A. A. Izotov, "Prospects for the Study of Present-Day Movements in the Earth's Crust by Geodetic Methods"	91
V. V. Danilov, "Some Results of Geodetic Measurements of Crust Deformations in Foreign Countries"	108
V. P. Shcheglov, "World-Wide Longitude Determinations as a Method of Studying the Movement of Continents"	120
A. Ya. Orlov, "Concerning Changes in the Latitude of Batavia, (Djakarta), Java"	143
Z. N. Aksent'yeva, "Results of an Eleven-Year Series of Observations on the Earth Tide M_2 With the Help of Horizontal Pendulums in Poltava From 1930 to 1941"	149
N. N. Pariyskiy, "Nonuniform Rotation of the Earth and Its Deformation"	157
Yu. D. Bulanzhe, "Secular Changes in the Gravitation Force"	175
Ye. I. Savarenskiy, "Deep-Focus Earthquakes and Deformations in the Earth's Crust"	183
V. A. Magnitskiy, "Geodetic Data and the State of Matter in the Upper Layers of the Earth"	198
G. P. Gorshkov, "Tectonic Earthquakes"	233

- 2 -

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A. N. Zavaritskiy, "Study of Movements in the Earth's
Crust on Kamchatka"

Page

242

V. F. Bonchkovskiy, "Methods of Measuring Tilts of the
Earth's Surface and Some Results of These Measurements"

252

- E N D -

- 3 -

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